

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. - 23. (Cancelled)

24. (New) A method for retrieving data location information for data stored in a distributed network, comprising the steps of:

a) receiving at a first client a data query for retrieving data associated with an identification string, wherein the data is stored at a data repository and wherein a location string associated with the identification string of the data is stored in at least one of a plurality of data location servers;

b) transmitting a data location request from the first client to a server to retrieve the location string associated with the identification string in the data query, the data location request including the identification string;

c) if the server is not a data location server, then operating the server as a next client and transmitting the data location request from the next client to a server logically associated with the next client;

d) repeating c) until the data location request is transmitted to a data location server, wherein a communication path is defined between the first client and the data location server; and

e) if the data location server does not possess the location string, transmitting a redirect message to the first client over the communication path, the redirect message containing information with which the first client is configured to determine a location of a second data location server, wherein the second data location server contains the location string.

25. (New) The method of claim 24, wherein transmitting the redirect message comprises transmitting a data location server table to the first client.

26. (New) The method of claim 25, further comprising:

f) calculating at the first client the location of the second data location server with a function commonly known to the data location server and the first client and based on the identification string and the data location server table.

27. (New) The method of claim 26, wherein the function comprises a hash function and wherein the first client applies the hash function to the identification string and the data location server table to obtain the location of the second data location server.

28. (New) The method of claim 24, wherein transmitting the redirect message comprises transmitting a function to the first client.

29. (New) The method of claim 28, further comprising:

f) calculating at the first client the location of the second data location server with the transmitted function.

30. (New) The method of claim 29, wherein calculating at the first client the location of the second data location server comprises applying the transmitted function to the identifier string.

31. (New) The method of claim 30, wherein applying the transmitted function generates a URL of the second data location server.

32. (New) The method of claim 24, wherein a length of the identification string and the location string each is variable.

33. (New) A method for retrieving data location information for data stored in a distributed network, comprising the steps of:

a) receiving at a first client a data query for retrieving data associated with an identification string, wherein the data is stored at a data repository in the distributed network and wherein a location string associated with the identification string of the data is stored in at least one of a plurality of data location servers;

b) transmitting a data location request from the first client to a first data location server to retrieve the location string associated with the identification string in the data query, the data location request including the identification string;

c) if the first data location server does not possess the location string, transmitting a redirect message to the first client, the redirect message containing information for use by the first client to calculate a location of a second data location server, wherein the second data location server contains the location string;

d) calculating the location of the second data location server at the first client; and

e) transmitting the data query from the first client to the second data location server.

34. (New) The method of claim 33, wherein transmitting the redirect message comprises transmitting a data location server table to the first client.

35. (New) The method of claim 34, wherein calculating the location of the second data location server comprises calculating the location of the second data location server with a function commonly known to the first data location server and the first client and based on the data location server table and the identification string.

36. (New) The method of claim 35, wherein the function comprises a hash function and wherein the first client applies the hash function to the identification string and the data location server table to obtain the location of the second data location server.

37. (New) The method of claim 33, wherein transmitting the redirect message comprises transmitting a function to the first client.

39. (New) The method of claim 37, wherein calculating at the first client the location of the second data location server comprises applying the transmitted function to the identifier string.

40. (New) The method of claim 38, wherein applying the transmitted function generates a URL of the second data location server.

41. (New) A system for retrieving data location information for data stored in a distributed network, the system comprising:

a plurality of data repositories configured to store data, wherein the data is associated with a respective identifier string in each data repository;

a data location server network having a plurality of data location servers, each of the plurality of data location servers containing location strings associated with respective identifier strings and each of the plurality of data location servers having computer executable code configured to execute the following steps:

in response to receiving a data location request from a client to retrieve a location string associated with an identification string provided in the data location request, transmitting a redirect message to the client if the identification string is not associated with a location string at the data location server, wherein the redirect message contains information for use by the client to calculate a location of a different data location server in the plurality of data location servers, wherein the different data location server contains the location string.

42. (New) A system for retrieving data location information for data stored in a distributed network, the system comprising:

a data repository configured to store data, wherein the data is associated with an identifier string;

a client responsive to a data query to query a data location server for location information associated with the identifier string;

a data location server network comprising a plurality of data location servers, at least one of the plurality of data location servers containing location information associated with the identifier string, wherein each of the plurality of data location servers comprises computer executable code configured to execute the following steps in response to receiving a data location request from the client:

if the data location server contains the location string associated with the identification string provided in the data location request, the data location server transmits location information for use by the client to calculate a location of the data associated with the identification string;

if the data location server does not contain the location string associated with the identification string, the location server transmits a redirect message to the client, wherein the redirect message contains redirect information for use by the client to

calculate a location of a different data location server in the plurality of data location servers, wherein the different data location server contains the location string.

43. (New) The system of claim 42, wherein the client and the plurality of data location servers each comprise a function commonly known to the client and the plurality of data location servers and wherein the client is configured to apply the commonly known function to the location information or redirect information.

44. (New) The system of claim 43, wherein the redirect message comprises a data location server table.

45. (New) The system of claim 44, wherein the commonly known function comprises a hash function and wherein the client is configured to apply the hash function to the identification string and the data location server table to obtain the location of the different data location server.

46. (New) The system of claim 42, wherein the redirect message comprises a transmitted function for use by the client.

47. (New) The system of claim 46, wherein the client is configured to calculate the location of the different data location server by applying the transmitted function to the identifier string.

48. (New) The system of claim 42, wherein the location information comprises a portion of a hash table distributed over the plurality of data location servers.

49. (New) The system of claim 42, further comprising a plurality of servers related in a logical hierarchy between the client and the data location servers, wherein each of the plurality of servers is configured to function as a next client and retransmit the data location request to a next logically associated server until a data location server receives the data location request.